

What is claimed is:

1. A wheel guide assembly for a sliding door comprising:
a mounting structure with a body portion and a top portion, wherein one end of the top portion is disposed at one end of the body portion;
at least one axle with a longitudinal axis disposed on the top portion of the mounting structure; and
at least one wheel with an axis of rotation,
wherein the wheel is rotatably mounted to the axle such that the axis of rotation is not always the same as the longitudinal axis.
2. A wheel guide assembly for a sliding door according to claim 1, wherein an angle is formed between the axis of rotation and the longitudinal axis when the wheel and the axle pivot relative to each other.
3. A wheel guide assembly for a sliding door according to claim 2, wherein the angle formed between the axis of rotation and the longitudinal axis is about zero to about 30 degrees.
4. A wheel guide assembly for a sliding door according to claim 3, wherein the angle formed between the axis of rotation and the longitudinal axis is about zero to about 15 degrees.
5. A wheel guide assembly for a sliding door comprising:
a mounting structure with a body portion and a top portion, wherein one end of the top portion is disposed at one end of the body portion;
at least one axle disposed on the top portion of the mounting structure, wherein a central portion of the axle is non-cylindrical in shape;
at least one wheel rotatably mounted to the axle.
6. A wheel guide assembly for a sliding door according to claim 5, wherein the central portion of the axle is an enlarged portion of the axle.

7. A wheel guide assembly for a sliding door according to claim 6, wherein the central portion of the axle is substantially spherical in shape.

8. A wheel guide assembly for a sliding door according to claim 6, wherein the central portion of the axle is substantially ellipsoidal in shape.

9. A wheel guide assembly for a sliding door according to claim 5, wherein a central portion of the wheel includes a plurality of flexible fingers that engage the central portion of the axle.

10. A wheel assembly for a sliding door comprising:
a wheel with a central portion that includes a plurality of flexible fingers; and
an axle with a non-cylindrical central portion,
wherein the plurality of flexible fingers engage the axle such that the wheel is rotatably mounted on the axle and can pivot on the axle.

11. A wheel assembly for a sliding door according to claim 10, wherein the central portion of the axle is an enlarged portion of the axle.

12. A wheel assembly for a sliding door according to claim 11, wherein the central portion of the axle is substantially spherical in shape.

13. A wheel assembly for a sliding door according to claim 11, wherein the central portion of the axle is substantially ellipsoidal in shape.

14. A sliding door assembly comprising:
a door;
a track;
a wheel disposed within the track; and
a movable connection between the door and the wheel, wherein the wheel remains aligned in the track even if the door is out of vertical.